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Amendments to the Claims:

This listing of claims, in which Claims 1, 20 and 36 are amended, will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for growing a thin film on a surface of a substrate in a reactor reaction chamber according to the ALD method, said method comprising:

providing a first conduit for delivering a pulse of a first vapor phase reactant and a second conduit for delivering a pulse of a second vapor phase reactant to said reactor reaction chamber;

providing at least a first substrate in a pre-reaction chamber and a second substrate in a said reaction chamber, said first substrate being positioned downstream of a point in the pre-reaction chamber where both said first and said second phase reactants have entered the pre-reaction chamber and said pre-reaction chamber being serially aligned downstream only with said reaction chamber first substrate upstream of said second substrate;

feeding the pulse of the first vapor phase reactant into said pre-reaction chamber and over the first substrate and subsequently into said reaction chamber and over the second substrate;

reacting the first vapor phase reactant with said surface of said first substrate and subsequently with a surface of said second substrate to form a thin film on said first and second substrates, wherein residual first vapor phase reactant remains in said pre-reaction chamber; and

feeding a pulse of a second vapor phase reactant into said reactor reaction chamber, wherein said second vapor phase reactant reacts with said residual first vapor phase reactant to form a solid reaction product in said pre-reaction chamber on said first substrate and said second vapor phase reactant subsequently reacts with said surface of said second substrate in said reaction chamber.

2. (Original) The method of Claim 1, wherein said residual first vapor phase reactant is in the gas phase.

3. (Previously presented) The method of Claim 1, wherein said residual first vapor phase reactant is adsorbed on the walls of the reaction chamber.